

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059171

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

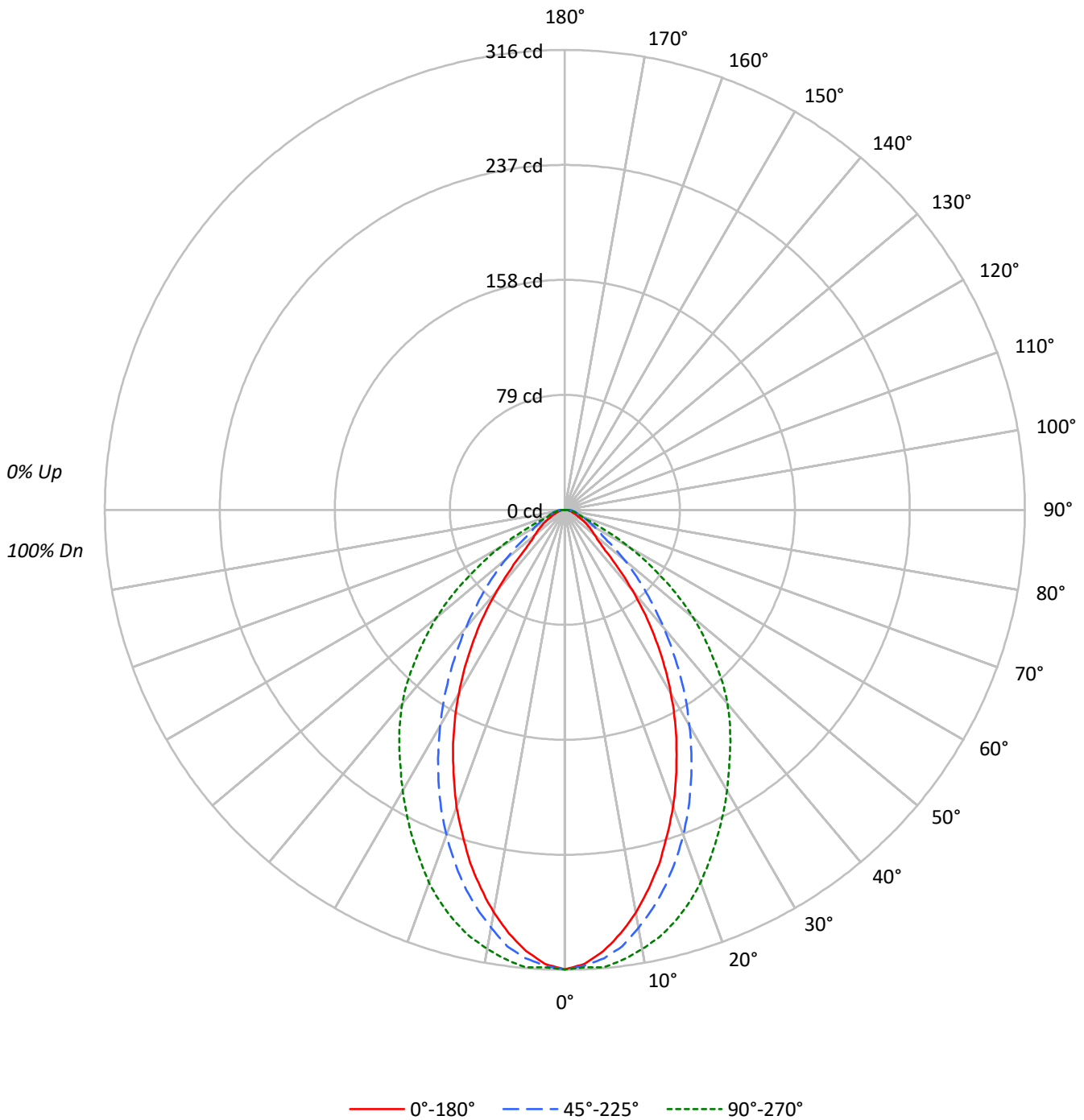
Lumens per Lamp: N/A
Luminaire Lumens: 424.0 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3708	3708	3708
5°	3588	3645	3718
10°	3349	3476	3653
15°	3053	3248	3558
20°	2717	2972	3408
25°	2353	2659	3213
30°	1974	2320	3021
35°	1564	1974	2840
40°	1107	1623	2664
45°	651	1284	2398
50°	488	976	2101
55°	409	659	1687
60°	331	561	1198
65°	261	481	633
70°	230	419	391
75°	213	390	372
80°	210	426	372
85°	269	633	472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2398 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.1	6.9
10°-20°	75.5	17.8
20°-30°	96.2	22.7
30°-40°	90.5	21.3
40°-50°	65.2	15.4
50°-60°	37.6	8.9
60°-70°	17.2	4.1
70°-80°	8.6	2.0
80°-90°	4.1	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	200.8	47.4
0°-40°	291.3	68.7
0°-60°	394.1	93.0
0°-90°	424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	304	310	309	312	315	28
15°	251	260	267	282	293	70
25°	182	191	205	228	248	83
35°	109	118	138	170	198	68
45°	39	49	77	116	144	33
55°	20	21	32	61	82	18
65°	9	13	17	19	23	10
75°	5	9	9	8	8	5
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	315.8	315.8	315.8	315.8	315.8
2.5°	312.3	316.2	313.5	313.9	314.6
5°	304.4	309.5	309.2	312.3	315.4
7.5°	293.5	299.3	302.5	307.2	311.5
10°	280.9	287.6	291.5	300.1	306.4
12.5°	266.4	275.0	280.1	291.5	300.5
15°	251.1	260.1	267.2	282.1	292.7
17.5°	233.8	243.6	252.7	270.3	283.3
20°	217.4	226.8	237.8	257.0	272.7
22.5°	199.3	209.5	222.1	242.5	260.1
25°	181.6	191.1	205.2	227.9	248.0
27.5°	164.0	173.4	188.3	213.4	235.4
30°	145.6	155.4	171.1	198.9	222.8
32.5°	127.5	136.9	154.6	184.8	209.9
35°	109.1	118.5	137.7	169.5	198.1
37.5°	91.0	100.8	121.2	156.9	186.4
40°	72.2	82.8	105.9	144.0	173.8
42.5°	54.5	65.9	90.6	130.6	160.1
45°	39.2	49.0	77.3	116.1	144.4
47.5°	30.6	35.7	65.1	101.2	129.9
50°	26.7	27.5	53.4	87.5	115.0
52.5°	23.1	23.9	42.0	74.5	99.3
55°	20.0	20.8	32.2	61.2	82.4
57.5°	16.9	18.0	26.7	48.6	66.3
60°	14.1	15.7	23.9	37.3	51.0
62.5°	11.4	14.1	20.4	27.5	36.5
65°	9.4	13.3	17.3	19.2	22.8
67.5°	7.8	12.2	14.5	13.7	13.3
70°	6.7	11.0	12.2	11.0	11.4
72.5°	5.5	10.2	10.2	9.4	9.4
75°	4.7	9.0	8.6	8.2	8.2
77.5°	3.9	7.8	7.5	7.1	6.7
80°	3.1	6.3	6.3	5.9	5.5
82.5°	2.7	5.1	5.1	5.1	4.3
85°	2.0	4.3	4.7	4.3	3.5
87.5°	1.6	3.9	3.9	3.5	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)